

$$a^2 = 1 - b^2 \quad c = \frac{a}{b} \quad d = \frac{1}{b}$$

① Find  $a$  if  $d=1$   $0$

② Find  $b$  if  $c=6$  and  $a=2$   $\frac{1}{3}$

③ Find  $a$  if  $b = \frac{3}{4} \pm \frac{\sqrt{7}}{4}$

④ Find  $b, c, d$  if  $a = \frac{2}{3}$   $b = \pm \frac{\sqrt{5}}{3}$   $c = \pm \frac{2\sqrt{5}}{5}$   $d = \pm \frac{3\sqrt{5}}{5}$

⑤ Find  $a$  if  $d = \frac{11}{4} \pm \frac{\sqrt{105}}{11}$

$$c = \frac{a}{b} \pm \frac{\frac{2}{3}}{\frac{\sqrt{5}}{3}} \Rightarrow \pm \frac{2}{3} \cdot \frac{3}{\sqrt{5}} = \pm \frac{2}{\sqrt{5}} = \pm \frac{2\sqrt{5}}{5}$$

$$d = \frac{1}{b} \cdot \frac{1}{\frac{\sqrt{5}}{3}} \Rightarrow 1 \cdot \frac{3}{\sqrt{5}} = \pm \frac{3\sqrt{5}}{5}$$

$$\sin^2 x = 1 - \cos^2 x$$

$$\tan x = \frac{\sin x}{\cos x}$$

$$\sec x = \frac{1}{\cos x}$$

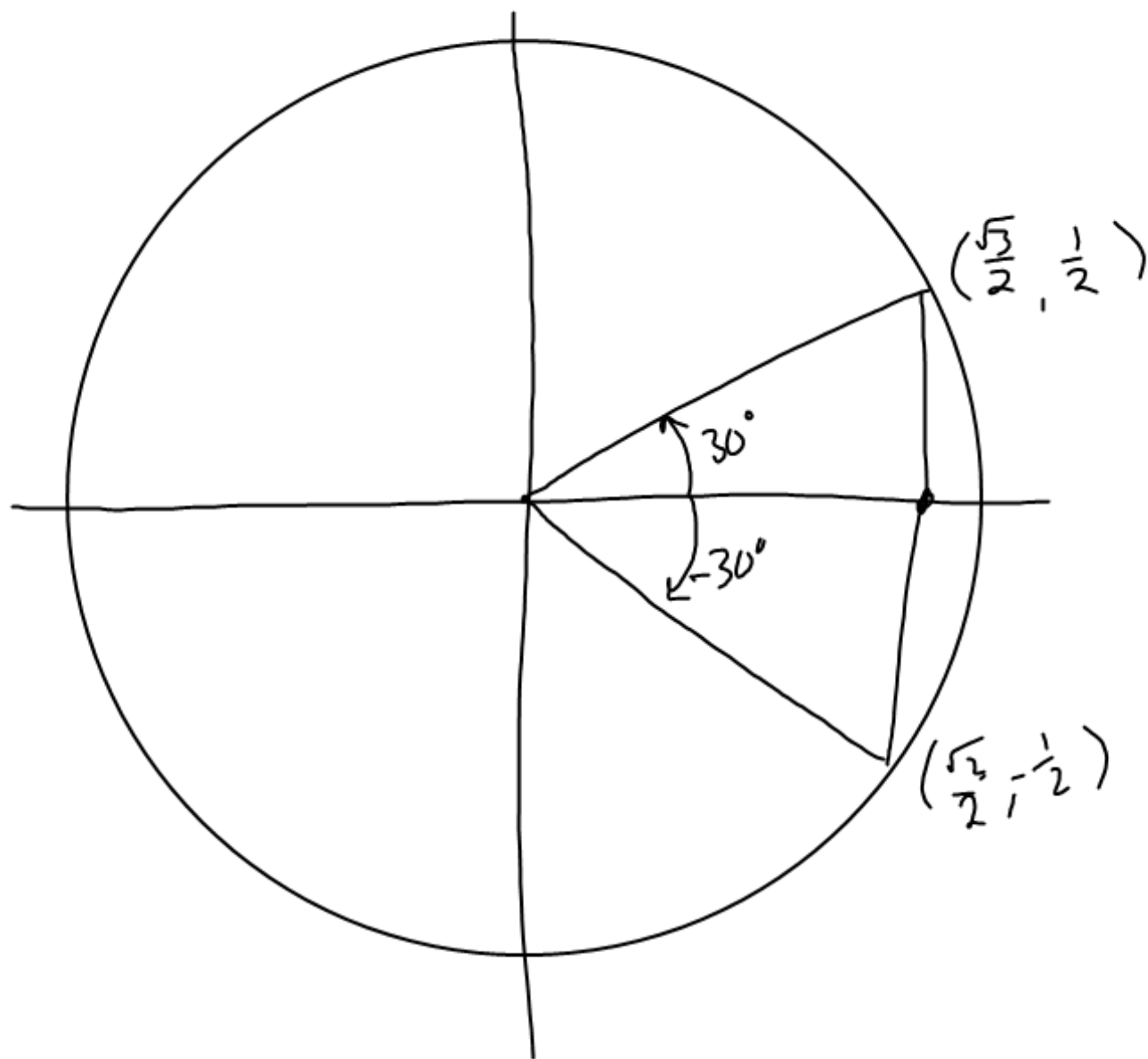
Find  $\sin x$  if  $\cos x = \frac{3}{4}$   
w/ identities

$$\sin^2 x = 1 - \left(\frac{3}{4}\right)^2$$

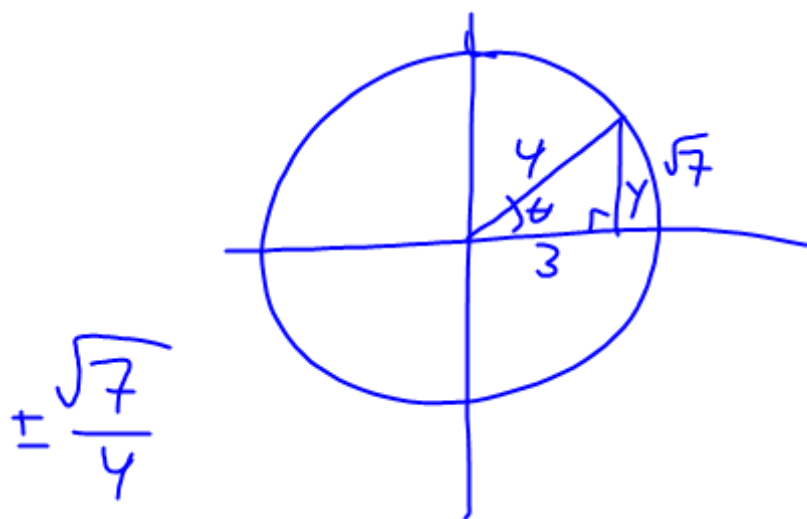
$$\sin^2 x = 1 - \frac{9}{16}$$

$$\sin^2 x = \frac{7}{16}$$

$$\sin x = \pm \frac{\sqrt{7}}{4}$$



Find  $\sin x$  if  $\cos x = \frac{3}{4}$



$$3^2 + y^2 = 4^2$$

$$9 + y^2 = 16$$

$$y^2 = 16 - 9$$

$$y^2 = 7$$

$$y = \pm\sqrt{7}$$

Sect. 5.1 # 6, 7, 8 (w/ identities), 12-17, 21+24 (w/o ident)

29-38, 40, 43-45, 49-57  
matching

- Turn in Application Problems (Packet)